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SERIAL NUMBER	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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S 10292032  
EXAMINER

ART UNIT	PAPER NUMBER
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3303

DATE MAILED: 10/13/94

This is a communication from the examiner in charge of your application.  
COMMISSIONER OF PATENTS AND TRADEMARKS

- ☐ This application has been examined ☒ Responsive to communication filed on 6-2-94  
7-5-94 ☐ This action is made final.

A shortened statutory period for response to this action is set to expire 3 month(s), — days from the date of this letter. Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

**Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:**

1. ☒ Notice of References Cited by Examiner, PTO-892. 2. ☐ Notice of Draftsman's Patent Drawing Review, PTO-948.
3. ☒ Notice of Art Cited by Applicant, PTO-1449. 4. ☐ Notice of Informal Patent Application, PTO-152.
5. ☐ Information on How to Effect Drawing Changes, PTO-1474. 6. ☐

## Part II SUMMARY OF ACTION

1. ☒ Claims 1, 4-30 are pending in the application.  
Of the above, claims \_\_\_\_\_ are withdrawn from consideration.
2. ☒ Claims 2, 3 have been cancelled.
3. ☒ Claims 1, 4-12, 22 are allowed.
4. ☒ Claims 13-21, 23-30 are rejected.
5. ☐ Claims \_\_\_\_\_ are objected to.
6. ☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.
7. ☒ This application has been filed with informal drawings under 37 C.F.R. 1.85 which are acceptable for examination purposes.
8. ☐ Formal drawings are required in response to this Office action.
9. ☐ The corrected or substitute drawings have been received on \_\_\_\_\_. Under 37 C.F.R. 1.84 these drawings are ☐ acceptable; ☐ not acceptable (see explanation or Notice of Draftsman's Patent Drawing Review, PTO-948).
10. ☐ The proposed additional or substitute sheet(s) of drawings, filed on \_\_\_\_\_, has (have) been ☐ approved by the examiner; ☐ disapproved by the examiner (see explanation).
11. ☐ The proposed drawing correction, filed \_\_\_\_\_, has been ☐ approved; ☐ disapproved (see explanation).
12. ☐ Acknowledgement is made of the claim for priority under 35 U.S.C. 119. The certified copy has ☐ been received ☐ not been received ☐ been filed in parent application, serial no. \_\_\_\_\_; filed on \_\_\_\_\_.
13. ☐ Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.
14. ☐ Other \_\_\_\_\_

### EXAMINER'S ACTION

Art Unit: 3303

The indicated allowability of claim 14 is withdrawn in view of the newly discovered prior art to Pletcher. The delay in citation of this art is regretted. Rejections based on the newly discovered prior art follow.

*Claim Rejections - 35 USC § 112*

Claim 30 is rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The last line of claim 30 is unclear.

*Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --  
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 15, 16, 23, 26, 28-30 are rejected under 35 U.S.C. § 102(b) as being anticipated by MERKEL et al (4,193,195). Merkel shows an orthodontic bracket comprising a body 25 having gingival and occlusal sidewalls, gingival and occlusal tie wings extending from the body and defining a labially opening archwire slot (29 or 30), and an auxiliary slot 31 extending through the body from the occlusal sidewall to the gingival sidewall. The bracket also includes an auxiliary orthodontic treatment device 20C having a shaft portion 56 positionable within the auxiliary slot. The slot and the shaft portion having complimentary configurations to restrict rotational movement therebetween.

As to claim 16, note that both the slot and the shaft portion have rectangular cross sections.

As to claim 23, note that the orthodontic treatment device includes a portion 58, 59 which extends beyond the gingival tie wing when installed in the auxiliary slot (see column 3, lines 24-26).

As to claim 26, note that the slot is located at the mesio-distal center of the bracket.

As to claims 28 and 29, note that the orthodontic treatment device includes, at the gingival end, a notch for receiving a generally mesio-distally extending force applying member.

Claims 15, 16, 23, 26 and 30 are rejected under 35 U.S.C. § 102(b) as being anticipated by GHAFARI et al (4,527,975). Note the auxiliary slot 22 and the auxiliary shaft portion 24 which have complimentary configurations to restrict rotational movement therebetween.

*Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

Claims 13, 14, 17-21 are rejected under 35 U.S.C. § 103 as being unpatentable over SUYAMA (WO 9,107,925) in view of PLETCHER (5,322,435). Suyama discloses the claimed invention except for the auxiliary slot positioned under the convex floor portion (see Figs. 17-20). Pletcher employs auxiliary slots 30 (one positioned at the mesial side of the bracket and the other at the distal side of the bracket) so that various attachments may be applied to the bracket (see column 5, lines 43-49). It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the bracket of Suyama with an auxiliary slot under each convex floor portion, in view of Pletcher, so that various appliances may be attached to the bracket when required during treatment.

Claims 24, 25 and 27 are rejected under 35 U.S.C. § 103 as being unpatentable over MERKEL et al (4,193,195) in view of PLETCHER (5,322,435). Pletcher employs auxiliary slots 30 (one positioned at the mesial side of the bracket and the other at the distal side of the bracket) so that various attachments may be applied to the bracket (see column 5, lines 43-49). It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the bracket of Merkel with an auxiliary slot under each archwire slot floor portion, in view of Pletcher, so that various appliances may be attached to the bracket when required during treatment.

#### *Claim Objections*

Claim 41 is objected to because of the following informalities: In line 8, the period should be deleted. Appropriate correction is required.

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*Allowable Subject Matter*

Claims 1, 4-12 and 22 are allowable over the prior art of record.

*Response to Amendment*

Applicant's arguments filed 20 June 1994 have been fully considered but they are not deemed to be persuasive. As to claim 15, the auxiliary shown by Ghafari is considered to be an "orthodontic treatment device" because it is used during orthodontic treatment. Applicant does not set forth any structure that would limit the orthodontic treatment device to a device that transmits orthodontic treatment forces to the bracket.

Applicant's arguments with respect to claim 13 have been considered but are deemed to be moot in view of the new grounds of rejection.

*Conclusion*

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cary O'Connor whose telephone number is (703) 308-0858.

*Cary E. O'Connor*  
CARY E. O'CONNOR  
PRIMARY EXAMINER  
ART UNIT 3303

ceo/d.4  
October 6, 1994